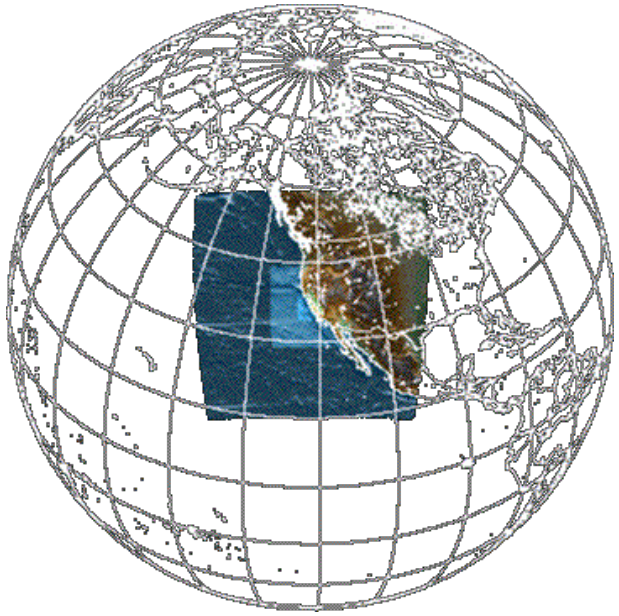
COAMPS -- On-Scene (OS)



Updated: January 25, 2001

Previous Acronyms of the system

STAF-C

DAMPS

TAMS/RT

Introduction

Automated portable atmospheric system. Performs,

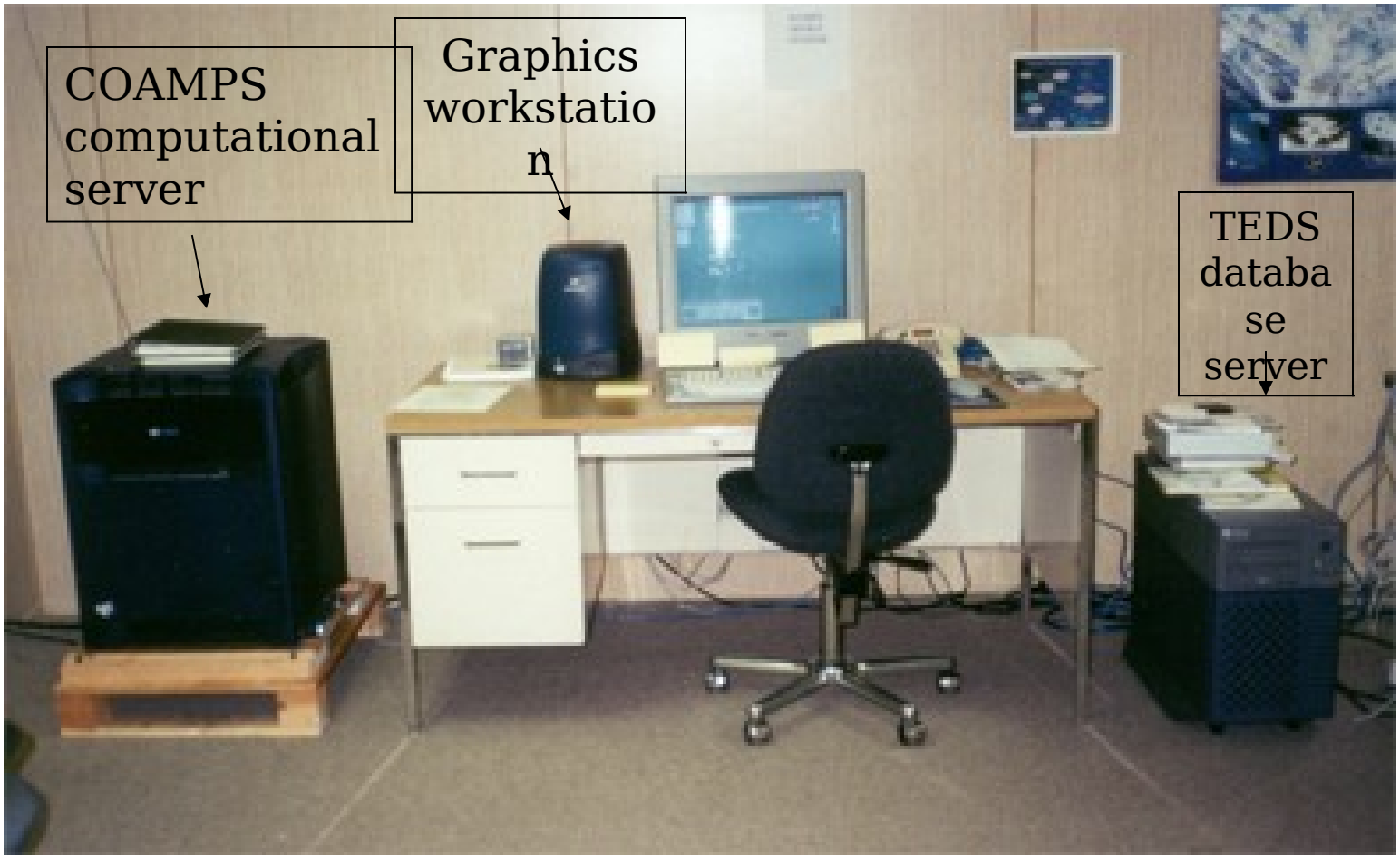
- Data assimilation
- Nowcast
- Forecast

Atmospheric Data Available

- Uses Large-scale model or mesoscale model gridded data fields as a first guess
  - NOGAPS
  - Its own forecast
- Augments first guess fields with observations
  - satellite data, etc.

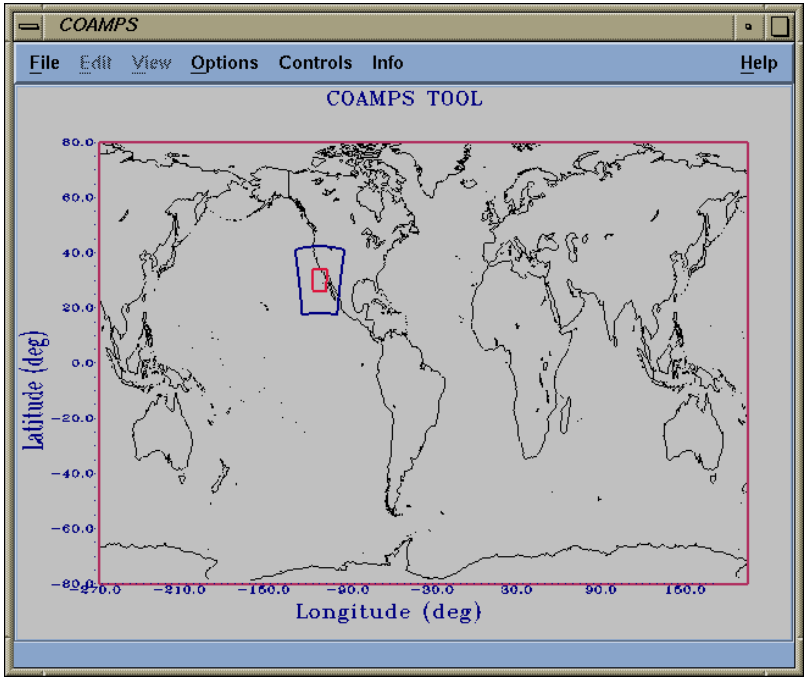
1. Pulls data from FNMOC databases
   - uses FTP and HTTP formats
     - Stores data in database
2. No tropical Bogus
3. Ingests --
   - NOGAPS Fields
   - OBS from Metcast,
   - Remote OBS via DPS
   - NO Bogus for tropicals
   - Local Observation
   - Uses CODA anal for sea temp!
   - Uses SFC bottom SST

Equipment



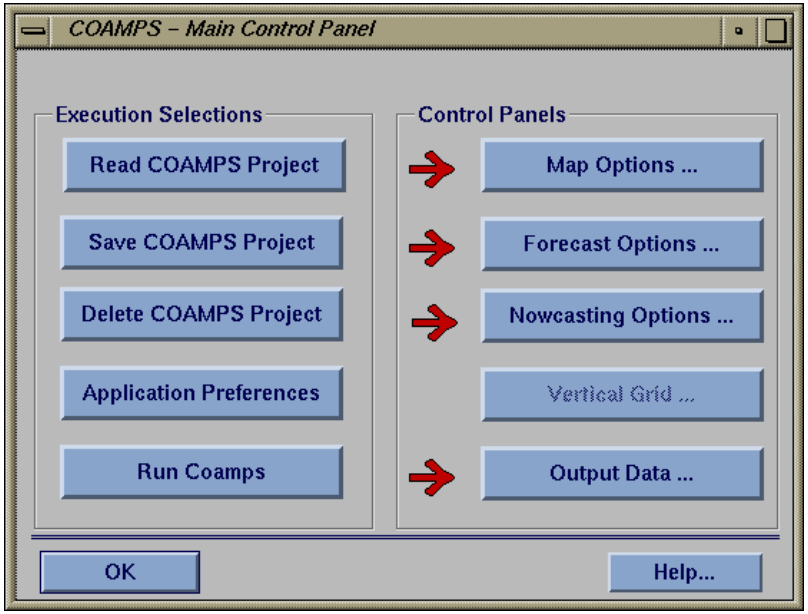
(Estimated cost -> $100,000 per unit, not installed)

Area Selection Dialog



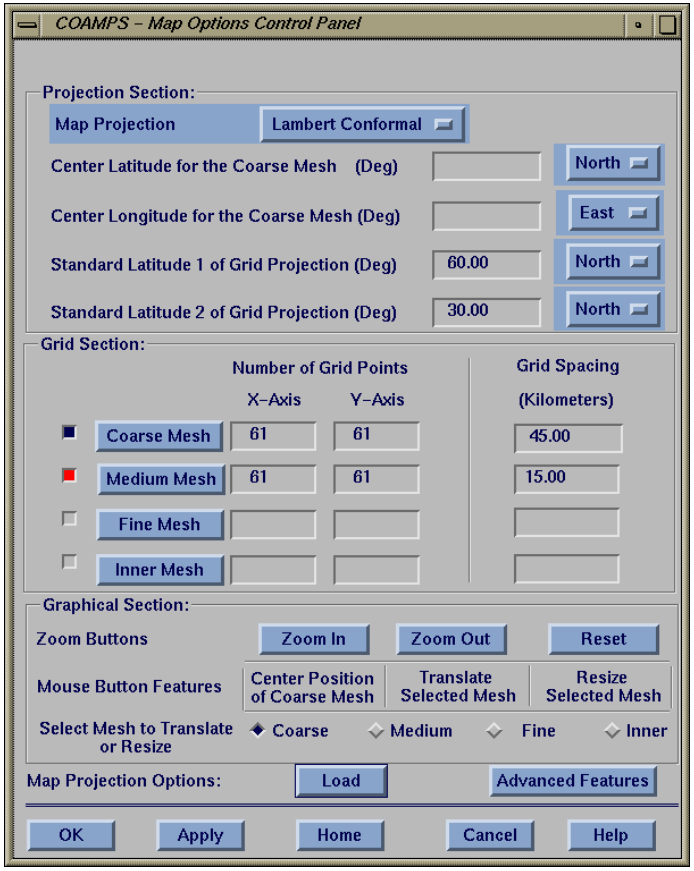
- Similar to METCAST selection tools
- Important to understand the influences of the topography
- Place nests over terrain to get effects from it.
  - Don’t locate over water only…

Main Control Panel



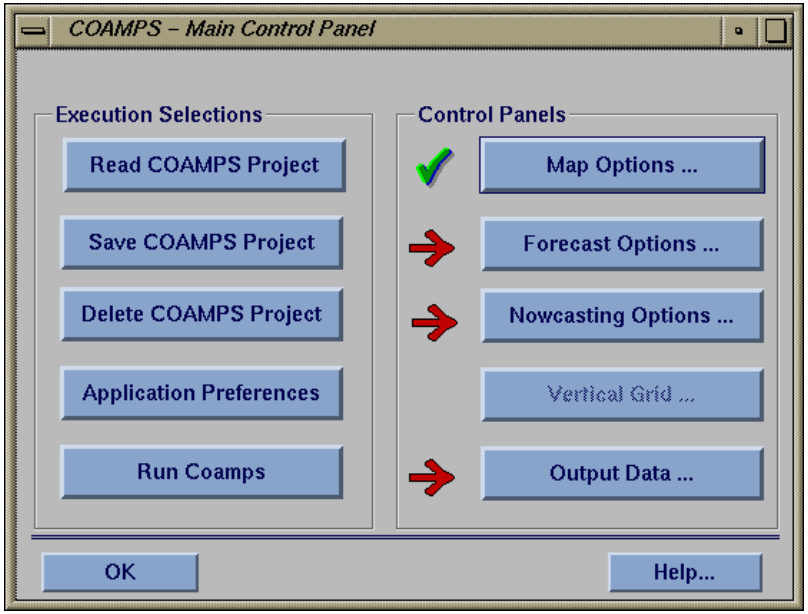
- Red arrow indicate information is needed prior to starting run.

Map Option Control Panel



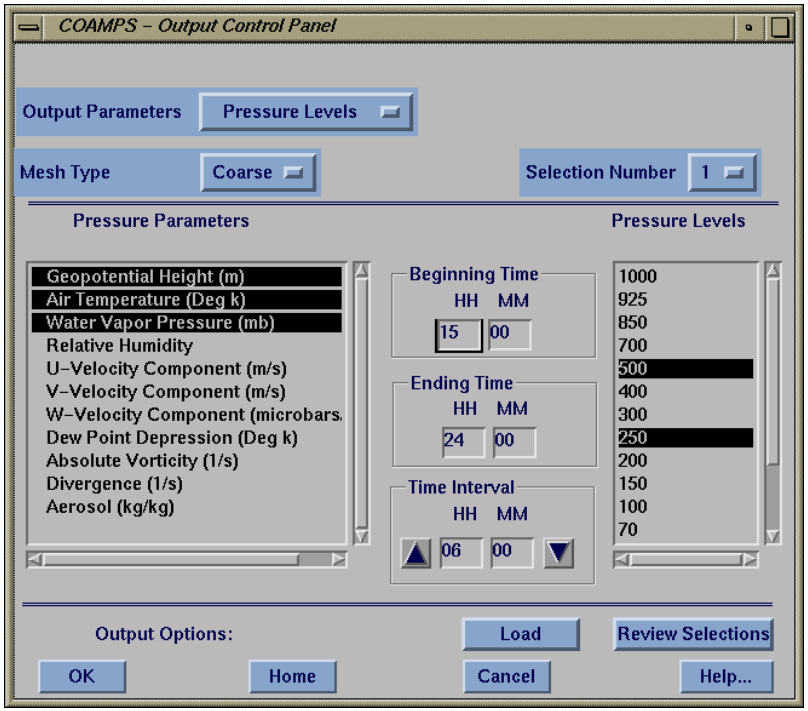
- Setup size of nests
- 81km first mess adjusted down to whatever resolution needed
- Smaller the grid spacing gets the quicker the error introduced
  - 10km good for 24 hrs
  -

Map Options – Complete



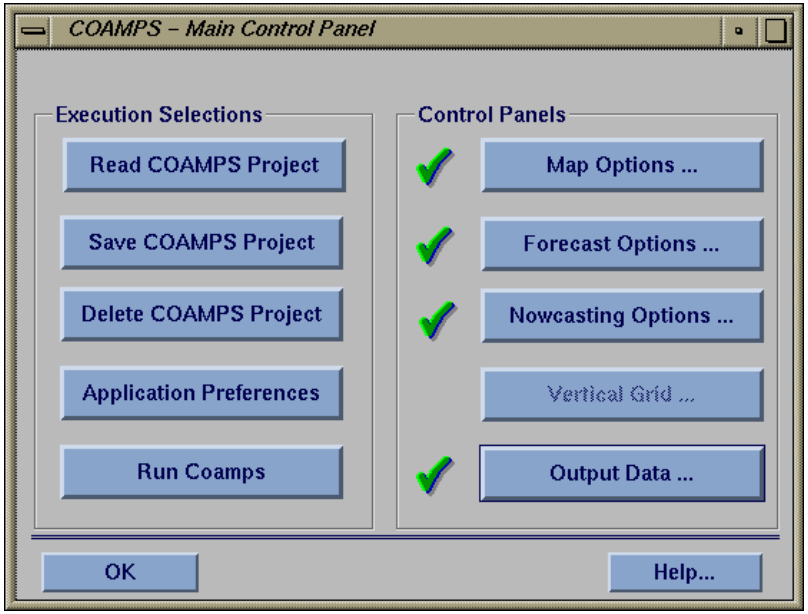
- Green check means enough information has been entered
- The Map, Forecast, Nowcasting, Vertical Grid, and Output Data must have a green check prior to starting the run.

Output Control Panel



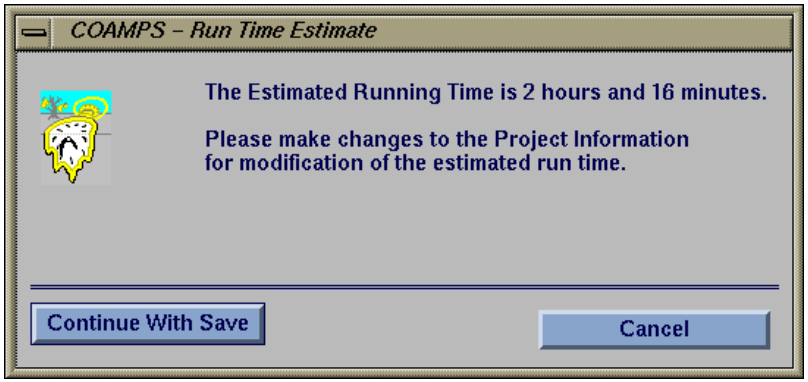
- Understand the products and what parameters go into them.
- A forecaster must know what factors they are going to be looked at?
  - Which products are needed to solve the forecast question.
  - Example
    - TLAM support
    - Icing

Once Complete…



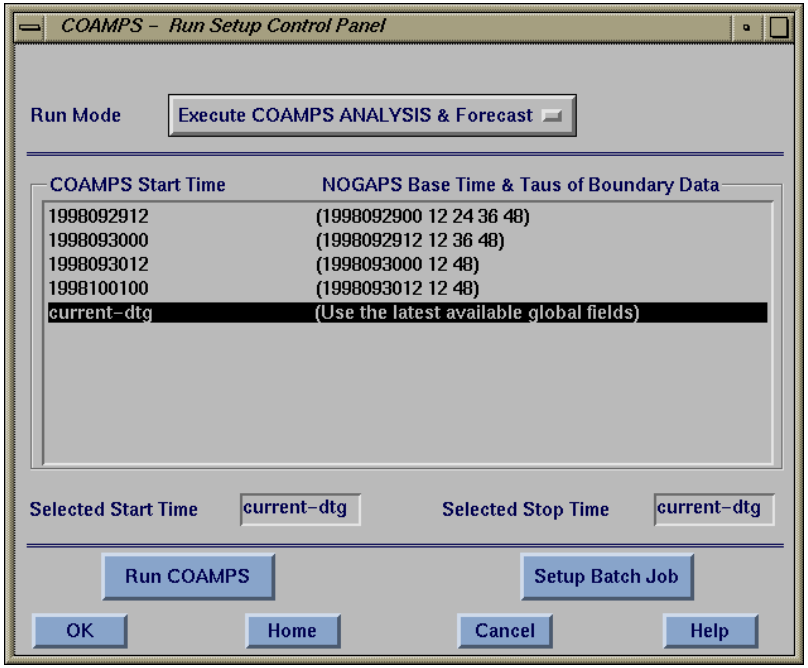
- The system is ready to begin the COAMPS run!
- How long will it take?

Run Time Estimate



- Before the run starts the program gives an estimate running time.
- Factors that change the run time length.
  - Resolution
  - Size of area
  - Number of products

Run Setup Control Panel



- That’s it!
- Run COAMPS!

Important factors to know

- Ability to control if system performs a hot or cold start
- O2 graphics machine is used to create gif images to view the data
  - WXMAP format
  - Holds past history of five days
- With a METCAST server installed it could be view via JMV.
- Products can be meteogram, or mercator (flat)chart
- Has Nowcast Option
  - RUC style of forecasting
  - Anal every hour

More…

- Could be used to forecast refractivity using tomorrow sounding!
- Can move a project to new area

References

- STAFC User Manual -- 2 November 1999
  - http://stratus.nrlmry.navy.mil/mon_html/TAMSRT_UM/